

Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040)

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BC Control Area load out continues



216-S-13 Crib Backfilling



200-SW-2 Landfill Investigations

Overview

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford*. There are three major components to this work scope:

- Deactivation & Decommissioning (D&D) [R. E. Wilkinson],
- Waste Sites Remediation [B. H. Ford], and
- Reliability Projects [R. M. Nichols].

NOTE: Unless otherwise noted, all information contained herein is as of the end of August 2008.

Notable Accomplishments

Deactivation and Decommissioning

231-Z Inventory Reduction

- Completed 231-Z Nuclear Facility Hazard Reduction

BC Control Area

- As of September 15, BC Control Area project has removed 26,367 tons of contaminated soil

200 North Area

- Received and incorporated EPA comments on 200-CW-3 Remaining Sites Remedial Action Work Plan (RAWP)
- Revised and transmitted 212-N/P/R Engineering Evaluation & Cost Analysis (EE/CA), per RL direction, removing rail car disposition from scope

U Plant Regional Closure Zone

- Transmitted revised U Plant Ancillary Removal Action Work Plan to RL and regulatory agencies for review and approval
- Received U Plant Remedial Design/Remedial Action Work Plan (RD/RAWP) to incorporate regulator comments per dispute resolution
- Obtained approval of Central Plateau Facility Decommissioning Agreement in Principle (AIP) by Tri Parties

Multi-Incremental Sampling (MIS)

- Completed Biological/Cultural/Historical Review
- Obtained approval by regulators of the Rev. 0 of the Sample Protocol Test Sample Analysis Plan (SAP)
- Obtained approval by regulators of waste control plan

Waste Site Remediation

- Completed all 16 DPT boreholes and 50 percent of gamma/neutron logging in B-53 trench
- Completed preparations to initiate DPT gamma logging in B-14 Crib
- Completed decommissioning all 21 deep DPTs for 200-CW-1 Operable Unit
- Reached total depth of 325 feet for 216-A-5 Crib borehole

Reliability Projects

- Completed construction on Project L-641, *273E Renovations*, ten weeks ahead of schedule.
- Project L-614, *Repeater Sites Safety Renovations*,
 - Completed the roof replacements for Rattlesnake (623A Facility) and Gable East (623B Facility).
 - Completed the lighting protection installation on 623A Facility roof.
 - Completed facility renovations design.
- Received DOE-HQ approval of the Hanford Ten-Year Site Plan.

FY 2008 Funds vs. Spend Forecast (\$M)

	Projected FY 2008 Funding	FY 2008 Fiscal Year Spending Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 88.3	\$ 72.0	\$ 16.3

Schedule/Cost Performance (\$M)

Nuclear Facility D&D, Remainder of Hanford	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion (FY08/ CTD)
Current Period (Month)	\$10.5	\$9.0	\$7.4	-\$1.5	-14.5%	\$1.6	17.4%	\$80.4
Cumulative-to-Date (FY 2004-Present)	\$322.6	\$315.1	\$304.0	-\$7.4	-2.3%	\$11.1	3.5%	\$336.0

Numbers are rounded to the nearest \$0.1M.

CTD Schedule Performance (-\$7.4M/-2.3%):

The unfavorable schedule variance (SV) for the D&D Project (-\$1.0M) is primarily due to the following:

- delays in awarding the procurement of the front end loader
- delays in completion of 200-UW-1 workscope (HRR, ROD, and U-361 Tank Study) resulting from lack of resources, and
- delays at BC Control due to ERDF restrictions (20 containers per day) and wind damage to the survey tent which delayed the start of excavation one week

The unfavorable SV for Waste Site Remediation (-\$5.7M) is primarily due to:

- aggressive field schedules, limited resources (nuclear operators and borehole drilling equipment) and competition from higher site priorities (groundwater and tank farms); and
- delayed start of the B-6 and S-13 boreholes to minimize safety impacts from high-risk borehole drilling during summer heat

The unfavorable SV for Reliability Projects (-\$0.7M) is due to:

- L-449, *Mortar Line 12-Inch Water Line – Baltimore*, construction delays pending completion of long term procurement of isolation valves
- L-614, *Repeater Sites Safety Renovations*, aggressive construction schedule slightly behind pending completion of RL-directed redesign
- L-606, *Overlay Road to Rattlesnake*, work scope on hold per RL direction
- additional work scope requirements requested by RL extended the Energy Policy Acts schedule
- offset by completion of L-641, *273E Building Enhancements*, construction ten weeks ahead of schedule

Schedule/Cost Performance (\$M), continued

CTD Cost Performance (+\$11.1M/+3.5%):

The favorable cost variance (CV) for D&D (+\$4.5M) is primarily due to the following:

- Prior year cost overruns in 200-UW-1 U Zone Waste Site Remediation (-\$4.4M) resulting from:
 - additional direct push sampling during field investigation to determine contamination levels.
 - greater than planned effort to resolve Feasibility Study/Planning Package (FS/PP) comments and Remedial Design SAP.
 - delays in barrier construction without reductions in staffing levels.
 - lateral spread of contamination at 200-W-42 resulting in more waste containers being shipped to the Environmental Restoration Disposal Facility (ERDF) than planned.
- Offset by prior and current year efficiencies (S&M, PM&S, and D&D) and variance distributions (+\$8.9M).

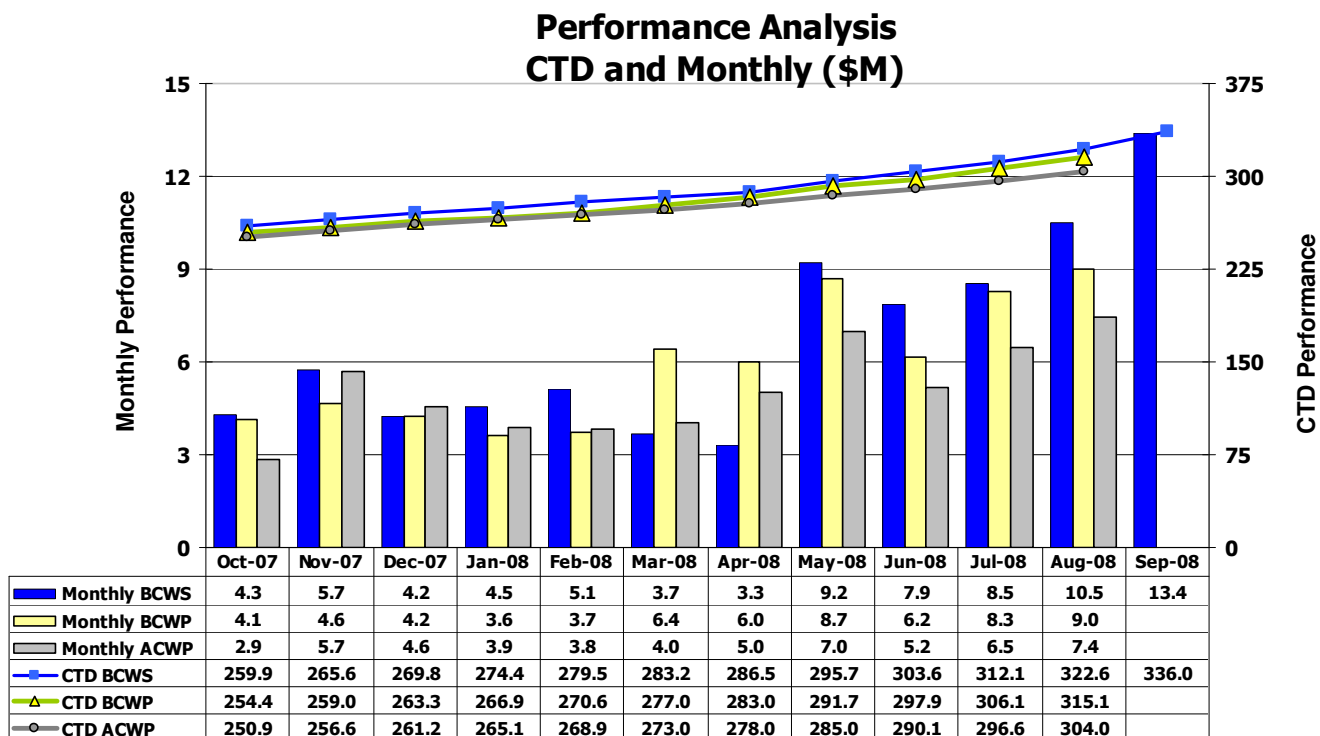
The favorable CV for Waste Site Remediation (+\$5.7M) is primarily due to:

- prior year project management savings offset by prior year increased costs associated with high-risk.
- boreholes.
- lower than estimated material costs.
- improved efficiency by field crews.
- favorable current and prior year variance distributions.

The favorable CV for Reliability Projects (+\$0.4) is primarily due to the following:

- efficiencies and favorable bids in prior year electrical projects (+\$1.5M), road refurbishments (+\$0.7M).
- capital equipment procurements (+\$1.0M), Project L-429, 12-Inch Water Line Mortar Lining Along 4th Street from Baltimore to Canton, (+\$0.5M). and other miscellaneous work scope (+\$0.4).
- offset by increase in steel prices for prior year facility and water projects (-\$3.2M), and prior year telecommunication projects technology deployment (-\$0.5M).

The favorable CV for Closure Services (+\$0.6M) is within established thresholds



Milestone Achievement

Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestones represent significant events in project execution. DOE Enforceable Agreement milestones were established to provide high-level visibility to critical deliverables and specific status on the accomplishment of these key events. The FY 2008 Enforceable Agreement milestone and Performance Incentives (PIs) information provided herein is based upon the current baseline including RL-approved changes. Changes from month-to-month in both the total number of milestones to be completed and in the forecast status of upcoming milestones are the result of Baseline Change Requests (BCRs) approved during the reporting period.

Number	Title	Type	Due Date	Actual Date	Forecast Date	Status / Comments
CPDD-07-004	212-N nuclear facility hazard reduction and downgrade completed	PI	11/30/07	10/25/07		Complete
M-091-40L-016	M-91-40L.4.D Quarterly Burial Ground vent/substrate sampling results (1st Qtr 2008)	TPA	12/15/07	11/21/07		Complete
CPDD-07-008	Complete Construction of Project L-626, 100B-A Water System Enhancement	PI	12/31/07	12/11/07		Complete
M-091-40L-017	M-91-40L.5.A Quarterly Burial Ground vent/substrate sampling results (2nd Qtr 2008)	TPA	3/15/08	2/25/08		Complete
CPDD-07-0010	Complete phase one of the BC Cribs and Trenches Treatability Test Plan	PI	3/30/08	3/28/08		Complete
CPDD-08-001	241-U-361 Settling Tank Characterization and Sampling completed	PI	3/31/08	3/4/08		Complete
M-091-40L-018	M-91-40L.5.B Quarterly Burial Ground vent/substrate sampling results (3rd Qtr 2008)	TPA	6/15/08	5/30/08		Complete
CPDD-08-004	Complete phase 2a of the BC Cribs and Trenches Treatability Test Plan	PI	7/31/08	7/16/08		Complete
M-15-40D	Submit Revised Feasibility Study Report and Revised Proposed Plan for the 200-CW-5 OU	TPA	7/31/08	7/15/08		Complete
M-091-40L-019	M-91-40L.5.C Quarterly Burial Ground vent/substrate sampling results (4th Qtr 2008)	TPA	9/15/08	8/13/08		Complete
CPDD-08-003	Complete characterization of potential contamination plume in the BC Cribs and Trenches	PI	9/30/08		9/30/08	On schedule
CPDD-08-006	Complete 231Z nuclear facility hazard reduction	PI	9/30/08	8/25/08		Complete
CPDD-08-011	Excavate 20,000 tons of contaminated Soil at BC Control Area	PI	9/30/08	9/8/08		Complete
CPRP-08-001	Complete construction for Project L-641, 273E Safety Enhancements	PI	10/31/08	8/12/08		Complete
CPRP-08-002	Complete construction for Project L-645, 100N Hanford Fire Department Potable Water System	PI	11/26/08		1/21/09	Behind schedule